Comparison of MetAP2 Homologues (mouse = SEQ TD NO:135) Fat = SEQ ID NO:17; human = SEQ ID NO:12; yeast = SEQ ID NO:14)

06 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	180 180 180 116	263 263 263 206	353 353 353 296	443 443 443 386	
90 TEEKERDDDEDGDG TEEKEKDDDDEDGDG TEDKERDEDDEDGDG VEQQDQAKADESDPA	166 WNDFREAAEAHRQVR WNDFREAAEAHRQVR WNDFREAAEAHRQVR WNDVRKGAEIHRRVR	256 270 KIDFGTHISGRIDC KIDFGTHISGRIDC KIDFGTHISGRIDC	346 HAGKTVPIVKGGEAT HAGKTVPIVKGGEAT HAGKTVPIVKGGEAT HGGKSVPIVKNGDTT	436 IMALKNLCDLGIVDP IMALKNLCDLGIVDP IMALKNLCDLGIVDP ILFALNNLVRHGIVQD	
61 GAJUDEVAKQIESQA IERKERDDDEDGGGGGGAJUDEVAKQIERGA IERKEKDDDDEDGGGGGSGSVDEVAKQIERGA IERKEKDDDDEDGGGGASVDEVAKQIERGA IEDKERDEDDDEDGGGSPAKDEINIENDG VEQQDQAKADESDEV	151 TSEEKKALDQASEEI TSEEKKALDQASEEI TSEEKKALDQASEEI SRYLKRDLERAEH	226 240 241 255 PPTGGSTANCARATY PRAGGTYVLQYDDIC PPTGGSTANCARATY PRAGGTYVLQYDDIC PPTGGSTANCARATY PRAGDTYTLQYDDIC PPTGLSTANCARATY PRAGDKTVLKYEDVM	346 330 331 345 SESPENDIGKTYOVE PRENIMERIGEPRI ESYEVELDGKTYOVE PIRNIMGRIGEPRI ESYEVELDGKTYOVE PIRNIMGRIGGPRI ESYEVELNGETOVE PRENIMGRIGGPRI ESYEVELNGETOVE	405 406 406 420 421 MANNEYMCHYPIELDE THILLAVINBNETL APCRANLDELGESKY MANNEYMCHYPIELDE THILLAVINBNEGTL APCRANLDELGESKY MANNEYMCHYPIELDE THILLAVINBNEGTL APCRANLDELGESKY ARSAEDRGVMFFLDS AKNLATIDRNEGTL PFCRRYLDELGESKY ARSAEDRGVMFFLDS AKNLATIDRNEGTL PFCRRYLDELGESKY	
46 KGAVSAVQQELDKES KGAVSAGQQELDKES KGPSAAGEQEPDKES	136 150 EYPPTQDGRTAAWRT EYPPTQDGRTAAWRT EYPPTQDGRTAAWRT DYHQDFNLQRTTDEE		316 ESYEVELDGKTYQVK ESYEVELDGKTYQVK ESYEVELDGKTYQVK ESYEVELNGETYQVK	405 406 LPR TKHLLNVINENFGTL LPR TKHLLNVINENFGTL LPR TKHLLNVINENFGTL LDS AKNLLKTIDRNFGTL	
45 AEEAAKKRRKKKG AEEAAKKRRKKKG AEEAAKKRRKKKKG	121 CDLYPNGVFPKGQEC CDLYPNGVFPKGQEC CDLYPNGVFPKGQEC	211 225 NGINAGLA NGINAGLA NGINAGLA ENILAMEDPKSQGIG	315 DVRLCDVGEAIQEVM DVRLCDVGEAIQEVM DVRLCDVGEAIQEVM DVRLTDIGEAIQEVM	405 MKNIFDVGHVPIKLPR MKNIFDVGHVPIKLPR MKNIFDVGHVPIKLPR ARSAEDHQVMPTLDS	RGDDY 478 EEMTIKT 480 RGDDY 478 KGDDY 421
30 : 30 : GDLDPDDREEGTSST / RDLDPDDREEGTSST / GDLDPDDREEGAAST / CDLDPDDREEGAAST / CDLDPDREEGAAST / CDLDPDREEGAAS	KRGPKVQTDPPSVPI KRGPRVQTDPPSVPI KRGPKVQTDPPSVPI NVKKI	196 ICEKLEDCSRKLIKE ICEKLEDCSRKLIKE ICEKLEDCSRKLIKE ICEKLEDCSRKLIKE IADMIENTTRKYTGA	286 AVKDATNTGIKCAGI AVKDATNTGIKCAGI AVKDATNTGIKCAGI AVKDATNTGIKCAGI	390 TGKGVVHDDMECSHY TGKGVVHDDMECSHY TGKGVVHDDMECSHY TGKGYVTAGGEVSHY	451 YPPLCDIKGSYTAQF EHTILIRPTCKEVVS YPPLCDIKGSYTAQF EHTILIAPTCKEVVS YPPLCDIKGSYTAQF EHTILIAPTCKEVVS YPPLNDIPGSYTAQF EHTILIAHKKEVVS
1 15 16 MACVEDAASFGGHIN GDLDPDREEGTSST AEEAAKKKREKKKG MAGVEEASSFGGHIN RDLDPDREEGTSST AEEAAKKKREKKKKK MAGVEEVAASGSHIN GDLDPDREEGTSST AEEAAKKKREKKKK	91 DADGATGKKKKKKK DGDGAAGKKKKKKK DGDGATGKKKKKKK ESKKKNKKKK	181 KYVMSWIKPGMTMIE KYVMSWIKPGMTMIE KYVMSWIKPGMTMIE RAIKDRIVPGMKLMD	271 285 AFTVTENPKYDILLT AFTVTENPKYDILLK AFTVTENPKYDTLLK AFTVSFDPQYDNILLA	361 RMEEGEVYAIETEGS RMEEGEVYAIETEGS RMEEGEVYAIETEGS KMEEGEHFAIETEGS	451 465 YPPLCDIKGSYTAQF YPPLCDIKGSYTAQF YPPLCDIKGSYTAQF YPPLCDIKGSYTAQF
mouse rat human yeast	mouse rat human yeast	mouse rat human yeast	mouse rat human yeast	mouse rat human yeast	mouse rat human yeast

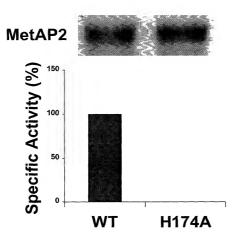
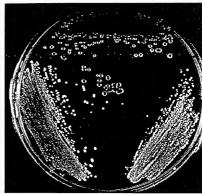


Figure 2





A. Glucose

B. Galactose

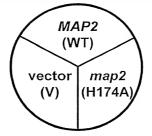


FIGURE 3

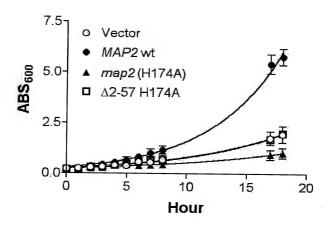
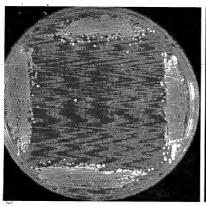
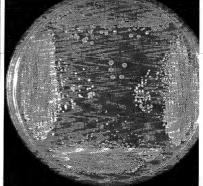


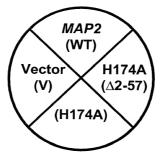
Figure 4





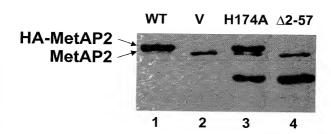
A. Glucose

B. Galactose



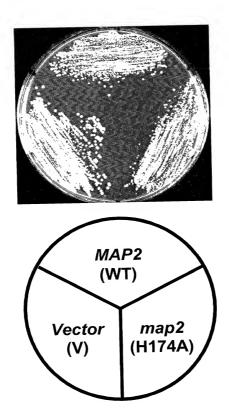
H174A-MetAP2 requires N-terminal residues 2-57 for inhibition of map 1Δ growth under the GAL1 promoter.

Figure 5



The steady state levels of each MetAP2 construct are comparable. Immunoblot comparison of HA-MetAP2 wt, HA-MetAP2 H174A, and MetAP2 $\Delta 2$ -57 H174A steady state levels in map1 Δ .

Figure 6



Overexpression of H174A-MetAP2 under the GPD promoter does not inhibit the growth of map 2Δ

Figure 7

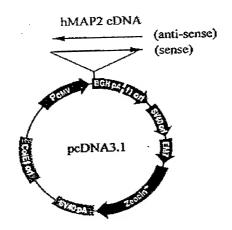


Figure 8

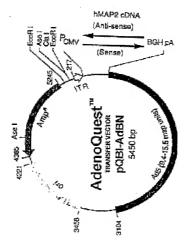


Figure 9

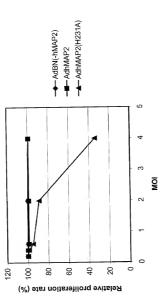


Figure 10

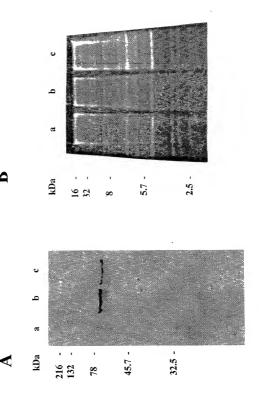


Figure 11